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10/591,997	09/07/2006	Akira Motonaga	295767US0PCT	6778
22850 7550 04092009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAMINER	
			PAUL, JESSICA MARIE	
ALEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER	
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			04/03/2009	ELECTRONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

## Application No. Applicant(s) 10/591,997 MOTONAGA ET AL. Office Action Summary Examiner Art Unit Jessica Paul 1796 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 08 December 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-7 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-7 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date. \_\_\_\_\_.

6) Other:

5) Notice of Informal Patent Application

Art Unit: 1796

### DETAILED ACTION

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsutomu (JP 2001-348515). The machine translation of this document is used for the citation purposes.

Regarding claim 1; Tsutomu teaches a coating composition which comprises a siloxane compound of the general formula (1):

(1) 
$$OR3$$
 $R^{1-O}$ 
 $R_{1}$ 
 $OR_{3}$ 
 $R_{1}$ 
 $OR_{3}$ 
 $R_{2}$ 
 $OR_{4}$ 

Wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, and R<sup>4</sup> are the same or different, represented by an alkyl group having 1 to 4 carbons, and n indicates and integer from 1 to 50 and a cationic initiator [0008-0009].

The examiner notes that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the

Art Unit: 1796

prior art, the claim is unpatentable even though the prior product was made by a different process." See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 2; Tsutomu teaches the composition further comprises a cationic polymerizable compound; which is a molecule having a cationically polymerizable functional group, which include, epoxy compounds [0012].

Regarding claim 3; Tsutomu teaches the coating composition further comprising a free radical polymerizable compound to be in certain instances, a vinyl compound having double bond functionality. Specific examples of the free radical polymerizable compound as disclosed by Tsutomu are diethylene methacyrlate, triethylene glycol dimethacrylate, propylene glycol dimethacrylate, and polyethylene glycol dimethacrylate [0041].

Regarding claim 4; Tsutomu discloses a coating composition which is curable by active energy rays comprising a free radical polymerization initiator [0009], an epoxy compound [0012], and a vinyl compound [0041].

Regarding claim 5; Tsutomu discloses a film formation method by applying the coating composition as set forth in paragraph 3, to a substrate, irradiating with active energy, and obtaining a cured film [0009].

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1796

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US Serial No. 2004/0202956).

Regarding claim 6; Takahashi et al. discloses a photoreactive (curable by active energy rays) composition comprising a hydrolyzable metal compound (A) and a compound (B) promoting reaction, polymerization or crosslinking of the hydrolyzable metal compound (A) in the presence of oxygen by irradiation of light [0050]. Wherein the hydrolyzable metal compound (A) can be octamethoxytrisiloxane (reads on applicants' instant formula (1)) [0059-0064, 0076]. The composition as disclosed by Takashi et al. may further contain an organometallic compound (E), which promotes hydrolysis and condensation reaction of the hydrolyzable metal compound (A) [0109]. Takahashi et al. also discloses the composition further comprising cationic polymerization initiators [0146-0147].

Regarding claim 7; Takahashi et al. teaches the photoreactive compositions can provide a cured product by applying it to a substrate and irradiating light to it. The composition can be used as a resist material, coatings, and films [0183-0186].

Wherein Takahashi et al. does not explicitly disclose in a preferred embodiment of an alkyl silicate of instant formula (1) and a cationic polymerization initiator,

Takahashi et al. does disclose all components as required by the applicants. Therefore, it would have been obvious, to one having ordinary skill in the art, at the time of the

Art Unit: 1796

invention, to try; picking and choosing from a finite number of identified, predictable solutions, with reasonable expectation of success.

#### Response to Arguments

Applicant's arguments filed 12/8/08, with respect to claims 1-5, have been fully considered but they are not persuasive. The applicant is reminded that product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production, and therefore the siloxane compound obtainable by hydrolysis and condensation of an alkyl silicate is not considered a limitation of Claim 1.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

# Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica Paul whose telephone number is (571)270-5453. The examiner can normally be reached on Monday thru Friday 8:00-6:00p; alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James J. Seidleck/ Supervisory Patent Examiner, Art Unit 1796 Jessica Paul Examiner Art Unit 1796

/JMP/